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ARTICLE

Science and the Ethics of Belief. An Examination of Philipse's 'Rule R'

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Abstract It has recently been argued that the following Rule should be part of any characterization of science: *Claims concerning specific disputed facts should be endorsed only if they are sufficiently supported by the application of validated methods of research or discovery*, and moreover that acceptance of this Rule should lead one to reject religious belief. This paper argues, first, that the Rule, as stated, should not be accepted as it suffers from a number of problems. And second, that even if the Rule were to be acceptable, it should not lead one to reject religious belief.

Keywords Ethics of belief · Scientism · Alvin Plantinga · Herman Philipse

An "Ethics of Belief" is an answer to such questions as: "What should we believe if we want to believe rationally, or responsibly?", "What should we do, if our aim is to acquire true rather than false beliefs?", "What intellectual and doxastic obligations are binding for us if we want to be rational and responsible believers?"[1]

One set of answers to these questions has sometimes, pejoratively, been named *scientism*.[2] According to this set of answers, what we should believe is what science tells us; what we should do when it is truth that we want, is do science, or to accept the testimony of scientists when they are writing or speaking in their capacity as scientists; the obligations we have if we want to be responsible believers, is to take science, and science alone, seriously. Alex Rosenberg, not minding the pejorative overtones of the word, has adopted the term scientism for his own position, defining it as "the conviction that the methods of

[1] See Chignell (2010).

[2] The pejorative use is in fact the most common one; see Haack (2007) and (2013, 105–120).

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science are the only reliable way to secure knowledge of anything" (Rosenberg 2011, 6). Other definitions of scientism have been offered, but they invariably display the same spirit as Rosenberg's scientism (see Stenmark 2001, 1–17).

It is one thing to endorse views that can be labelled as scientistic, it is quite another to make the case for such views. It seems that the case is more often *assumed* to have been made, than actually made. Since scientistic views, and certainly Rosenberg's,[3] have far reaching implications, any attempt to make such a case must be welcomed.

In a recent paper Herman Philipse seems to advance just such a case. He proffers a certain rule, "Rule R", that he thinks of as an epistemic rule that should be part of an elaborated characterization of science, and in fact of any ethics of belief.[4] It is an ethics of belief in which science and the application of scientific methods stand center stage. Here is how he formulates the rule:

> Rule R: Claims concerning specific disputed facts should be endorsed as (approximately, probably, etc.) true only if they are sufficiently supported by the application of validated methods of research or discovery. (Philipse 2013, 97)

Philipse furthermore proffers the following necessary condition S for 'having a scientific attitude':

> S: An individual has acquired a scientific attitude only if (s)he applies rule R to factual claims that are of importance for her/him, or relies on testimonies of experts who applied rule R. (Philipse 2013, 97)

Rule R certainly has quite a bit of intuitive appeal—it can even look like plain common sense. A closer examination, however, reveals a number of problems. This paper, which is an examination of R (and implicitly also of S), is organized as follows. Section 1 deals with some preliminaries. Section 2 argues there is an ambiguity in Philipse's understanding of the relation of Rule R to science. Section 3 discusses the notion of 'facts' and the scope of the facts that should be brought under Rule R. Section 4 zeroes in on Philipse's use of the notion of "positive factual claim" and argues that it can't do the work that he wants it to do. The final section throws cold water on Philipse's claim that the application of R makes trouble for religious belief, but it also questions the viability of R itself.

1 Preliminaries

One Philipse proposes R in the context of a critical discussion of Alvin Plantinga's claim that "there is a superficial conflict but deep concord between science and theistic religion" (Plantinga 2011, ix) and argues for the following thesis:

> C(onflict): Adherents of religions, to the extent that they endorse positive factual claims to truth concerning supernatural entities such as gods, hell, heaven, angels, ghosts, immortal souls, etc. violate rule R, because typically these claims are not sufficiently supported by the application of validated methods of research or discovery. (Philipse 2013, 98)

[3] Scientism, he argues, entails, among other things, that there is no purpose to the universe, no meaning of life, no free will, no moral difference between right and wrong, and between good and bad (Rosenberg 2011, passim).

[4] Philipse himself suggests that Rule R is part of an ethics of belief; see Philipse (2013, 98).

Two Rule R exclusively concerns *disputed* facts.[5] This means that as far as R is concerned, it is perfectly proper to endorse a certain factual claim that is not supported by the application of validated methods of research or discovery—as long as the factual claim is not disputed.

Three R refers to 'methods' of research or inquiry. A method, on the face of it, is something you *apply*, a sequence of actions you intentionally perform in order to secure a certain result. However, Philipse uses the notion of 'method' in a very broad sense so that even perception and remembering qualify as methods, even if neither are naturally thought of as items that we 'apply'.

Four R refers to '*validated* methods of research or discovery'. When is a method validated? Philipse's answer is that a method is validated provided it survives the following tests (that he formulates in the form of maxims):

- Maxim 1 says that "repeated and mutually independent applications of one and the same method should yield consistent and informative results" (Philipse 2013, 97).
- Maxim 2 says that "one should test whether various detection methods or instruments using different techniques yield the same result if applied to the same issue" (Philipse 2013, 97).
- Maxim 3 says that "in case of theory-laden methods and techniques, theoretical understanding of these methods and techniques may contribute decisively to (de-) validation, and of course the relevant theories should be well confirmed by various types of evidence" (Philipse 2013, 98).

Regarding the issue whether perception and memory are 'methods', Philipse says they *are* methods because "we are validating them continually by applying implicitly the three maxims for validation" (Philipse 2013, 100–1). After all, he says, "whenever…factual [perceptual or memory, RvW & JR] claims about the world are seriously disputed, we validate our sources explicitly", and hence "our proper reliance on testimony or memory is not an exception to rule R" (Philipse 2013, 101).

Five Philipse in fact proffers two different epistemological rules. In his informal introduction he says that science should be defined as "the search for factual truth by utilizing the best validated truth-conducive method available *at a time*" (Philipse 2013, 96), whereas R contains neither a time index nor any contrastive element ("best validated …at a time"). We take it, however, that R should be construed as including the time index as well as the contrast. If so, this means that a certain factual claim may conform to R at one time, but not at another, depending on whether the method utilized was the best validated method available at that time.

Six Rule R talks about "*sufficient* support by application of validated methods." If one is to work with this notion with any show of precision, this requires a measure by which degrees of support can be measured. Philipse offers no such measure, which makes it difficult to pronounce on whether a particular claim is sufficiently supported, given R.

Seven We said that R is part of Philipse's "Ethics of Belief" and it is beliefs that Philipse wants to discuss. Still, R is not about *beliefs* but about endorsing *claims*, and these

[5] We take this to be Philipse's official position. Elsewhere in the same paper, however, Philipse writes as if Rule R should be applied to factual claims (or beliefs) generally, so not only to claims concerning *disputed* facts: "…one might object to rule R that we all accept many factual beliefs which do not result from using validated methods of research or discovery" (Philipse 2013, 100).

can be construed as rather different animals.[6] For purposes of this paper, however, we will identify these notions: to believe that P just is to endorse the claim that P.

Let us now examine R.

2 Rule R and Science

In the paper under discussion, Philipse is in fact working on the familiar demarcation problem, i.e. the problem of how to distinguish science from non science. In this enterprise R plays a central role. Yet, as indicated, R is supposed to be only a *part* of an elaborated characterization of science. This means that although observance of R is necessary for science, it is not sufficient for it. Hence we can't, on the basis of what we are told, say what falls in the extension of 'science'. However, Philipse makes it clear that what the Germans call *Wissenschaft* falls in it. He doesn't explain, however, what he takes to fall in the extension of *Wissenschaft*, apart from the remark that it includes "historical research and other areas of scholarship" (Philipse 2013, 96). Now usually the main division resorting under the German notion *Wissenschaft* is the division between *Naturwissenschaft* (physics, chemistry, biology, certain parts of psychology, astronomy, medical sciences) and *Geisteswissenschaft*, that includes the historical research that Philipse mentions, as well as the unspecified "other areas of scholarship". Perhaps the latter also includes *Literaturwissenschaft* ("Literary Studies"). It must be noted however, that *Geisteswissenschaft* very often is also held to include theology. And so we face a certain vagueness in Philipse's account of science: we are given a necessary condition for something's being science (viz. observance of R), we are not given sufficient conditions for something's being science, and we are given an unspecified reference to what falls in the extension of 'science', viz. those areas of research and scholarship that the German word *Wissenschaft* refers to.

At the same time, however, Philipse also seems to think that (the observance of) R is necessary *and* sufficient for science. So he *also* seems to think that wherever R is observed, there *is* science, and that wherever there is science, there R is observed. This is suggested by his remark that "science…should be defined in methodological terms, as the search for factual truth by utilizing the best validated truth-conducive methods available at a time" (Philipse 2013, 96). If science is so defined, and if perception and memory are validated by the implicit application of the three maxims, then the extension of 'science' is much more capacious than ordinary usage of that word suggests that it is. For then cautiously perceiving one's surroundings qualifies as science—if that is the best 'method' available at the time. And checking how many rooms of the St. James hotel are rented out on a particular day by counting the number of keys that have been handed out, must be named 'science' too—provided that is the best method at the time.

These two ways of thinking about the relation between R and science are not identical. The first leaves it open that a certain range of applications of R does not qualify as science, whereas the second forecloses that possibility. Yet both carry the following entailment:

- if something is science, then R is observed

the counter positive of which is:

[6] For example, there is a sense of 'belief' such that we can say of John that he believes that he is shorter than 50 feet, even though he has never so much as even entertained the proposition that he is shorter than 50 feet. If this is an example of belief, it isn't an example of John endorsing the claim that he is shorter than 50 feet—an endorsement of a claim being a rather conscious affair.

- if something violates R, there is no science.

These are the entailments we will be examining.

3 Facts Exempt from the Application of R

Rule R concerns *facts*. Philipse provides no explanation as to the extent of this category, apart from one telling remark. If we take the category of fact, and ordinary ways of speaking about facts, at face value, we must note a wide variety of facts. There are putative physical facts (water's freezing at 0 °C), biological facts (the cells of the human body's being diploid), astronomical facts (the earth's revolving around the sun), mathematical facts (there being exactly one even prime number), historical facts (Caesar's crossing the Rubicon), etc. Many would add to this list moral facts (e.g. the fact that an unjust act has more demerit than an unkind one, or the fact that William Wallace was a brave man) as well as epistemic facts[7] (e.g. the fact that Susie's belief that John lied to her is justified; or the fact that S's belief that p is sufficiently supported by the application of validated methods of research). In a word, many are willing to say there are normative (so: moral and epistemic)[8] facts.

However, in a telling passage Philipse says that "if normative statements are truth-apt, we should exclude ultimate moral norms etc. from this definition" (Philipse 2013, 96, fn. 33)—the definition being the following definition of science: "science (in the broad sense of *Wissenschaft*, including historical research and other areas of scholarship) should be defined in methodological terms, as *the search for factual truth by utilizing the best validated truth-conducive methods available at a time*" (Philipse 2013, 96; italics in the original). So: if normative statements are truth-apt, i.e. if there are normative facts, says Philipse, no science of them is possible, perhaps because he thinks there are no validated methods for research in the normative realm. This is telling indeed, as no motivation or argument is given why normative facts, if they exist, are to be excluded from the application of R. And it raises the question why, if normative facts are excluded, certain other facts can't be excluded from the application of R as well? We need a criterion by means of which we can decide to which facts R is to be applied and to which other facts it is not to be applied. And we need furthermore a decent argument in favour of that criterion. In the absence of these, the acceptance of R as well as the exemption of normative facts from the application of R, is unmotivated.

But perhaps the exemption is *not* unmotivated. Suppose that normative facts should also be brought under Rule R. Then the following dialectic ensues.[9] Rule R itself states a normative fact, viz. the fact that claims about disputed facts should be endorsed only if they are sufficiently supported by the application of validated methods of research. The fact that R states is a normative fact because it states a *should*. Now the fact that R itself states, is a *disputed* fact, for many philosophers don't believe that R states a fact.[10] Hence,

[7] An excellent discussion of both moral and epistemic normative facts, as well as of the numerous parallels between them, is Cuneo (2007).

[8] There may be normative facts in addition to moral and epistemic facts, e.g. legal facts (e.g. the fact that Susie's action was a case of burglary), linguistic facts (e.g. the fact that one shouldn't use 'if' and 'when' as if they were synonyms).

[9] What follows is not dissimilar to the discussion of the neo-positivist Verification Criterion, with Rule R taking the place of the Criterion.

[10] For instance, see Plantinga (1983).

if one is to endorse R (so the normative fact that R states) as true, R must be sufficiently supported by the application of validated methods of research. But what are those methods? Which methods are such that their application render R sufficiently supported? That is not easy to say. Certainly the sciences aren't going to tell us what those methods are! But if science is not going to tell us that, then what will? The wish to avoid this quandary may perhaps be a motive to exempt normative facts from the application of R. If this is correct, the exemption is no longer unmotivated. But then it seems *ad hoc*.

We note a further difficulty in Philipse's handling of R in relation to facts. Philipse endorses direct realism concerning sense perception (Philipse 2013, 101, fn. 41; Philipse 2000 is a defense of the position.). Direct realism is the philosophical claim according to which the objects of perception exist independently of any mind that might perceive them, and that those objects can be perceived 'directly', i.e. without any intermediaries such as "mental ideas" or "sense data".[11] It seems rather obvious that direct realism is a factual claim, as it purports to convey a putative fact about perception. But direct realism is by no means undisputed, to understate the case. It is contested by Berkeleyan idealism, for example, and by various forms of indirect realism.[12] In fact, direct realism is a minority position in the philosophy of perception. This means that if Philipse's belief in direct realism is to conform to Rule R, it should be sufficiently supported by the application of validated methods of research or discovery. But what validated methods render direct realism sufficiently supported? Well, what validated methods render *any* philosophical claim sufficiently supported? *Are* there any such methods? Given what Philipse tells us (or rather tells us *not*—see remark *Six* in Sect. 1) about sufficient support this cannot easily be decided. Since very many philosophical claims are factual claims (e.g. such claims as are tagged 'idealism', 'substance dualism', 'identity theory', 'mereological essentialism', 'modal realism', and such claims as that time is unreal, that space is unreal, that a private language is impossible, that humans have identity over time, and so forth) and are furthermore heavily disputed, R requires that they should be endorsed as true only if they are sufficiently supported by the application of validated methods. If such methods don't exist, philosophers should not be idealists, nor substance dualists, nor identity theorists, etc. nor affirm the complements of these views, and Philipse should not be a direct realist.

Or at least, so it seems. For Philipse tells us that he does not consider direct realism to be a factual claim. This is quite remarkable. So remarkable that either Philipse uses the expression 'factual claim' in a very peculiar way[13] or he is simply wrong. As we have not found any evidence that he uses that expression in a peculiar way, we are left with the other alternative. Direct realism *is* a factual claim—and a disputed one at that. But as there seem to be no validated methods the application of which render direct realism sufficiently supported, Philipse transgresses against R in being a direct realist.

There is a further matter that requires attention. If one is going to apply Rule R one must make claims of the following sort:

[11] See e.g. Dancy (1985, 147–151).

[12] Many problems for direct realism are discussed by Chalmers (2006), and other papers in Zsabo, Gendler and Hawthorne (2006).

[13] Perhaps Philipse could stress the point that R is about claims concerning "specific disputed facts" and that direct realism is a claim not about "specific" facts. But that won't do. For "general facts" (assuming that is the complement of "specific facts") have instantiations in "specific facts". If direct realism is a general fact, then John's perceiving a tree is a specific instantiation of that general fact, meaning that the tree exists independently of John's perception of it, and that the tree is the direct object of John's perception.

Sufficient Support Claim (SSC): the claim that is under dispute is sufficiently supported by the application of validated methods of research.

But why should one endorse a specific SSC? An SSC states a putative normative fact. Why should one endorse such an SSC? Since normative facts are exempt from the application of R, we can't appeal to R in order to find out whether or not we should endorse that specific SSC. But then what *should* make us endorse or reject a particular SSC? Philipse doesn't tell. In any event, he seems to face the following dilemma: either

(a) deny the existence of normative facts,

or

(b) affirm the existence of normative facts.

But both have unpalatable consequences for him. For if he takes horn [a] and says there are no normative facts, this implies that no SSC is true (i.e. then no claim about disputed facts is sufficiently supported by validated methods of research). But if no SSC is true, the application of Rule R will never lead anyone to endorse a claim about a disputed fact! On the other hand, if he takes horn [b] and says there *are* normative facts, and also says that normative facts are exempt from the application of R, then the application of R becomes, as suggested earlier on, *ad hoc*; for then there must be ways of evaluating factual claims other than through the application of R. And if exemption of R is required, or even necessary, then why may not claims concerning other kinds of putative facts be exempt from the application of R as well?

This section, then, has identified three problems for Philipse's handling of R: normative facts, if they exist, are exempted from the application of R, which seems *ad hoc*; direct realism is exempted from the application of R, even though it is a factual claim; commitment to R places Philipse for a dilemma, both horns of which would seem to have unacceptable consequences for him.

4 Positive Factual Claims

As was indicated in preliminary remark *One*, R is developed in the context of an argument for the claim that science and religious belief are in conflict with each other. Philipse contends that when R is applied to "positive religious claims", they cannot be maintained. We will take a closer look at this claim in the next section. In this section we investigate the notion of "positive factual claim".

We start by noting that "There is no God" is a factual claim. Is it also a 'positive' claim? As Philipse doesn't say what he means by 'positive factual claim' this is hard to make out. So let us canvas some possibilities. First, a claim can be called a positive factual claim provided it is an empirical claim that is either true or false. The contrast here is with non-empirical claims like "$7 + 5 = 12$" (and mathematical and logical claims in general) and with meaningless claims like "her dream weighed 20 kg." In this sense the claim that "God exists" is a positive factual claim: it is not a logical or mathematical claim, nor is it meaningless. But then the claim that "There is *no* God" is *also* a positive factual claim. Recall that Philipse's conflict thesis C says that endorsements of "positive factual claims to truth concerning supernatural entities…violate rule R". But if C is true, this means that, by parity of reason, "There is no God" *also* violates R. And this in turn means that, given R, the proper response to any religious positive factual claim must be agnosticism (Someone who balks at the suggestion that "There is no God" is a positive factual claim, should ask

herself this question: 'why should the standards for negative and positive factual claims be different?').

One might reply: C says that when *adherents of religions* endorse positive factual religious claims they violate rule R, but an atheist is not an adherent of any religion, and so the parity of reason argument does not go through. However, nothing Philipse says suggests that he thinks that atheists are free to violate rule R. One could perhaps even think that Philipse holds that the endorsement "There is no God" does *not* violate R—because it *is* sufficiently supported by the application of validated methods of research.

But this invites the following response: we haven't been given anything that qualifies as "sufficient support" through the application of validated methods of research or discovery for the endorsement of "There is no God". Certainly Philipse has not provided anything of the sort, neither in Philipse (2013), nor in his 2012 book *God in the Age of Science?*[14] In fact, Philipse implicitly seems to be making a presumption of atheism:[15] he implicitly assumes that if he can show that arguments for theism don't work, atheism follows. A presumption of atheism, however, is by no means an innocent thing (see Plantinga 1983), and certainly not something that Philipse's discussion partners, those he wishes to convince, viz. theists, are likely to grant.

The conclusion from these considerations is that if we construe "positive factual religious claims" in the way suggested, then "There is no God" also qualifies as a positive factual claim. And so, given R, it must be endorsed as true only if it is sufficiently supported by the application of validated methods of research. But if C is true, there is a conflict between "There is no God" and R. Hence "There is no God" must be rejected. The point, then, is that if "There is a God" violates R, then so does "There is no God".

As this may not be Philipse's desired conclusion, charity requires we must explore an alternative understanding of the notion of a "positive factual claim". A claim could also be a *positive* factual claim provided it *asserts* the existence of some entity in contrast with a *negative* factual claim that *denies* the existence of that entity. Then, if we grant Philipse, if only for the sake of argument, that theists violate R because they make positive factual claims that are not sufficiently supported by validated methods of research, then the negative counterpart does not seem to violate R—after all, that is not a positive but a negative claim, and so R does not apply to it.

This however raises the worry that the distinction between positive and negative factual claims is a will-o'-the-wisp. After all, every negative factual claim can easily be rewritten as a positive factual claim. Here is the way to do it: "there is no X" can be rewritten as "there exists an X-less cosmos". And if we accept R, R should be applied here too. And so also on this second understanding of "positive factual claim" atheism too is a positive factual claim—viz. the claim that "There exists a God-less cosmos". And if one adopts R for positive factual claims, one must adopt it for this claim too. Hence, given R, there cannot be a presumption of atheism. If one adopts R, the presumption must be that there is a level playing field.

[14] Philipse (2012) does purport to give three arguments for atheism, but two of them (an argument from evil, and an argument from divine hiddenness) *are not even arguments for atheism*. They are merely arguments against monotheism as traditionally understood. And, of course, the falsehood of monotheism does not imply atheism. The third argument is for the conclusion that bodiless spirits are highly improbable given our background knowledge about the supervenience of the mental on the physical. The latter argument is unconvincing, as Peels (2013) has convincingly shown. This means that the application of R would certainly render "There is no God" insufficiently supported by Philipse's arguments!

[15] See Peels (2013).

This section, then, has identified an unclarity as to how Philipse understands the notion of a "positive factual claim". Two plausible ways of understanding this notion were explored. On both of them "God does not exist" qualifies as a positive factual claim. And this means that there can be no presumption of atheism. We moreover indicated, by reference to the work of Peels and Rutten, that Philipse himself has not observed R in his endorsement of atheism.

5 Religious Belief and Rule R

We now proceed to discuss Philipse's Conflict thesis and raise three issues. First, how bad is it when religious people violate R? Second, is C true?—is it correct, as Philipse claims, that religious people, to the extent that they endorse positive factual claims concerning 'supernatural entities', violate rule R? And third, what, if anything, speaks in favour of R?

5.1 How Bad is it When Religious People Violate R?

One rather sensible response to this question is: not very. For two of Philipse's main claims are:

(1) Science is defined by R,[16]

and

(2) Religious people, when making religious factual claims, violate R. (=C)

But all that follows from this is that when religious people are making religious factual assertions, *they are not doing science*. For a theist that need not be a very bad conclusion. After all, the typical theist doesn't think her religious belief is based on, or the product of, scientific research. Seen in this way, Philipse's charge that violating R is a very bad thing, comes to naught. Likewise, the charge that religious people, when making factual religious claims, are lacking in 'scientific attitude' isn't much of a problem either. For a religious person thinks there are supports for her beliefs, also her factual religious beliefs, other than through scientific research.

5.2 But do Theists Violate R?

As we have seen in the preliminary discussion in Sect. 1, R is open or not fully defined in the following two dimensions: R doesn't specify when a claim is and when it is not sufficiently supported by validated methods (preliminary *Six*); and the notion of 'method' is rather broadly used, so as to include perception and memory (preliminary *Three*).

The question we should now like to take up cannot possibly be adequately dealt with within the confines of one paper. The only thing we can do is make some preliminary and brief remarks that suggest that claim C is by no means obvious. The question is: are there 'methods' (in Philipse's broad sense) that theists 'use' when they believe that God exists—

[16] In Sect. 2 we noted that Philipse is not entirely clear on the relation between science and R. On the one hand he seems to say that R is necessary, but not sufficient for science (leaving open the possibility of extra scientific applications of R), while on the other hand he seems to be saying that where ever R is applied, there is science. Both of these thoughts have separately one joint implication—viz. that if R is violated, there is no science. The way to read (1) in the body of the text is: Science is either partly or fully defined by R.

and if so, are these methods validated along the lines of the three maxims? The answer to the first question is, yes, there may very well be such 'methods'. Much discussed methods include: (i) reasoning that proceeds from premises that are evident to the senses (cosmological arguments); (ii) reasoning that proceeds from apriori premises (ontological arguments); (iii) putative mystical awareness of God; (iv) putative divine revelation. Are these methods validated along the lines of the three maxims?[17]

It is not obvious that they aren't. As to maxim 1: many people who have independently considered arguments for God's existence, so many who have independently used methods (i) and (ii), have found them somewhat plausible. Furthermore, the application of methods (i) and (ii) have yielded consistent results: each token-application of these methods lead to a theistic conclusion. Hence (i) and (ii) don't obviously fail maxim 1. The same holds for method (iii). There are surely considerable differences between what people get out of putative mystical experiences. Still, there are commonalities too, they seem to trigger belief in the existence of a being that is 'greater' than human beings and that transcends physical reality, and they do this in persons across times and cultures. [18]Hence, (iii) does not obviously fail maxim 1 either. Something similar holds for (iv), putative divine revelations. To be sure, such alleged revelations lead persons to believe things that are sometimes hard to square with each other. Yet, those beliefs are not massively inconsistent. For example, the putative history of Jewish/Christian revelations seems to lead to beliefs that are to a fair degree consistent with each other—and many beliefs formed by this method in the Islamic tradition seem consistent with these as well. So although it is by no means clear sailing, (iv) doesn't obviously fail maxim 1. There may be an analogy with perception here. Beliefs formed in response to visual perception may, across persons, be inconsistent. But this as such doesn't disqualify visual perception as a method. Rather, it calls for a specification of the conditions under which it *does* lead to beliefs that are consistent across persons. An analogous move can be tried in the case of method (iv).

As to maxim 2: it is not clear that these methods fail this maxim either. After all, these methods yield beliefs that seem to complement and confirm each other to a certain extent: they all yield belief in a being of maximal greatness that transcends physical reality.

So we suggest that it isn't obvious that the religious 'methods' do not and cannot survive maxims 1 and 2. Are the methods validated *enough* to support factual religious claims? In the absence of a very clear benchmark (see our preliminary *Six*), the proper thing to say at this point is that it is not clear that they don't. And if we are correct here, a theist qua theist may not be violating R after all, and may hence not suffer from a lack of scientific attitude.

There is a further issue here that merits attention. In the informal presentation of Rule R, Philipse included a time index (see preliminary *Five*): science, he says, is "the search for factual truth by utilizing the best validated truth-conducive method available *at a time*." Methods used at one time may be better validated than methods used at another (usually earlier) time. Now methods used for research in area A will typically differ from methods used in area B. Methods used in brain sciences will differ from the methods used in ecology. And it may be that the methods used in one area are better validated than the methods used in another area. And there may be a differential development of method between areas. This may mean that positive factual claims in area A can satisfy Rule R,

[17] We only make the briefest of suggestions regarding maxims 1 and 2; we forego any exploration of maxim 3, as that would take us too far afield.

[18] See Alston (1991).

and so can be part of science, even when the research methods that are used aren't very well validated. For all that the time-indexed Rule requires, is that the methods be the best validated methods *at that time*. With respect to the Conflict thesis this has an important implication. For then the following may be the case: the methods "used" by religious believers to obtain truths about God may have the following two properties: they are not validated as well as the methods used in micro biology *and* they are the best validated methods currently available for this particular area.

Philipse, no doubt, will have to say many things in response to these admittedly very broad suggestions just offered. He will respond, first and foremost, that we have side stepped the entire argument of section IV of Philipse (2013, 102–104), which in turn is only a quick summary of the extended argument against a number of claims to the effect that religious belief is justified, or warranted, or rational that he has provided in Philipse (2012). We need not go into this, however, as all his criticisms of these claims have been ably dealt with by Peels (2013), De Ridder and Berger (2013), and Rutten (2013). But, as we will now proceed to argue, even if these rebuttals were to miss the mark, this would by no means render R obvious, or an acceptable ethics of belief.

5.3 Should We Adopt R?

Even if, as we have suggested, theists may be able to conform to R, it is still an open question whether R must be accepted in the first place. So, why adopt R? Interestingly, although Philipse proffers R as (part of) an ethics of belief, he doesn't tell us *why* we should adopt it. In this section we argue that R as it stands faces serious problems and that there is good reason to reject it. This doesn't mean that chisholming away on R might not lead to a modified version of R that doesn't face these problems. But even if this could successfully be done, this doesn't amount to an argument pro (an appropriately modified) R, which is what Philipse owes us.

A first problem for R has already been explicated in Sect. 3: certain facts, if they exist, are exempt from the application of R, viz. normative facts. Philipse owes us a criterion by means of which we can distinguish between facts that should and facts that should not be submitted to R, and he furthermore owes us an argument for the criterion. In the absence of these, R is either unmotivated or ad hoc, which are equally good reasons for not accepting R.

A second problem, along the same lines, is this. We all occasionally form beliefs about our own mental states, such as that we feel tired, or happy. Suppose now that you feel tired and claim so much, and that your claim is contested (perhaps your boss thinks you are making a lame excuse in order not to have to show up at a meeting). Then R must be applied, for what we have here is a claim concerning a disputed fact. Given R, claims to the effect that you feel tired should be endorsed only if they are sufficiently supported by the application of validated methods of research. Now what methods of research support claims about mental facts? Just to have a name, let us call this method the method of 'inner awareness' or 'self-consciousness'. Has this method been validated along the lines of the three maxims—or *can* it even be so validated? Suppose you feel tired. Then it is a mental fact that you feel tired. Can mutually independent applications of this method yield consistent results? If you apply this method 10 times over a period of 10 min then you get consistent results; but these applications are not mutually independent. So maxim 1 can't be satisfied here. Can different techniques yield the same result if applied to this case? Well, there don't seem to be different techniques by the application of which you feel that you are tired—there is just this one method of inner awareness. So maxim 2 can't be

satisfied here either.[19] Hence, it seems, the method of inner awareness cannot be validated and hence must be rejected if one accepts R. Hence, I should not endorse (believe) that I feel tired. But that seems unacceptable, as inner awareness is very important to us, and there are no alternative routes to its yield. Hence, by reductio, R must be rejected.

And there is a further problem for R. Disputes about metaphysical facts are ubiquitous in philosophy. Do numbers exist? Do universals exist? Do immaterial souls exist? Peter van Inwagen has argued that universals exist, and that nominalism is, therefore, false (Van Inwagen 2004). Not everybody is convinced by this argument. Still, Van Inwagen maintains his view. What would R rule about Van Inwagen's way of going about? It rules: the existence of universals is a disputed fact. So claims about them should be endorsed as true only if they are sufficiently supported by the application of validated methods. What method did Van Inwagen apply? Some such method as theoretical reasoning; he argues that unless one assumes the existence of universals certain other facts cannot be properly understood or explained. He applies, we may say, some form of inference to the best explanation. Is that a validated method? Well, it can be and has been contested (Van Fraassen 1989)—and so cannot uncontroversially be said to be validated. And so R rules that Van Inwagen should not endorse the existence of universals. But it also rules that nominalists should not endorse their nominalism. (Nominalism is also a factual claim, viz. the claim that our world is a world without universals). And so the effect of accepting R means one must refrain from endorsing claims about universals. In fact, the effect of applying R in philosophy in general (esp. in metaphysics, epistemology, philosophy of mind and philosophy of science) is that we should stay silent. That is quite a price. If one thinks the price is too high, one must, by reductio, reject R. (Alternatively, Philipse has to provide a criterion by means of which we can distinguish areas of factual claims where R should, and areas of factual claims where R should not be applied. And the criterion should furthermore be well motivated. But as we have seen when discussing Philipse's exempting moral facts from the jurisdiction of R, he provides no such criterion.)

Next, R is supposed to be definitive of science, or the scientific method. But the application of R to the most well developed parts of physics makes for serious trouble. R, we may assume, entails that one should not endorse factual claims P and not-P at the same time. However, it is well-known that Quantum Mechanics and Relativity Theory are incompatible with each other. And so what should scientists, given R, do? Given R, they should give up either QM or RT, or both. But of course they should do neither. Rather, as both theories are very well established indeed (even if they are incompatible), what they should do is give up R. And as R is not written in the stars, but simply proposed by a philosopher, this is something they can gladly do without any pangs of intellectual guilt, without sacrificing their 'scientific attitude' (although they sacrifice that attitude as described by Philipse).[20]

[19] Maxim 3 seems inapplicable here, as inner awareness isn't a theory-laden technique.

[20] The most formidable problem for R has been formulated, to speak anachronistically, in Alston (1993). The problem arises when one thinks about how our basic belief forming methods (Alston talks about such 'faculties' or 'basic belief forming mechanisms' as perception, memory, reasoning) can be validated (or 'shown to be reliable', in Alston's words). Alston argues that every attempt to show that our basic belief forming mechanisms are reliable gets stuck in what he calls 'epistemic circularity': it is impossible to show that perception is reliable without, somewhere in the argument, assuming that it is reliable. The circularity is not the most direct kind of logical circularity; it isn't that in such arguments the conclusion is already among the premises. The circularity is a bit more indirect: among the premises of an argument for the reliability of, say, perception, are some that are such that you can't adopt them if you don't believe that perception is reliable. We won't pursue this matter here, but raise the issue only because it shows that perception and memory (that Philipse thinks of as validated 'methods' of research) cannot in any straightforward sense be validated (or shown to be reliable).

6 Conclusion

Scientism can be thought of as an ethics of belief. Philipse has made a case for a scientistic ethics of belief of which Rule R is the centrepiece, and on the basis of which he argues for C, the claim that adherents of religions, to the extent that they endorse positive factual claims concerning supernatural entities, violate R. We have argued that Philipse's case for a scientistic ethics of belief suffers from a number of problems and that, even if his ethics of belief did not suffer from these problems, C fails to follow. Along the way we noted a number of other problems in the way Philipse builds his position.

The problems that beset this ethics of belief are: (1) although R is a perfectly general rule that must be applied to claims concerning disputed facts, Philipse says that normative facts are exempted from its application; this exemption, we argued, is unmotivated or *ad hoc*. (2) R seems to entail that claims about our own mental states should never be endorsed, which constitutes a *reductio* for R. (3) R seems to entail that many philosophical claims (such as direct realism, or the existence of universals) should never be endorsed either, which is a very high price to pay.

Even if R did not suffer from these problems, we argued furthermore, it is not clear that people, in using the methods they do use in forming religious beliefs, violate R. For these methods, we suggested, may very well satisfy maxims 1 and 2.

Along the way we noted a number of other problems in the way Philipse builds his position: (1) there is a certain ambivalence in the way Philipse relates Rule R and science; (2) he faces a dilemma concerning the existence of normative facts, both horns of which have unacceptable consequences for him; (3) it is unclear how the notion of "positive factual claims" must be understood; but atheistic claims too qualify as positive factual claims to which R must be applied—which cuts against the presumption of atheism that Philipse makes.

The net result of our examination is that this particular case for a scientistic ethics of belief fails.

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